# Connections with Hawaiki: the Evidence of a Shell Tool from Wairau Bar, Marlborough, New Zealand

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ABSTRACT

A tool from the archaeological site at Wairau Bar, New Zealand, is identified as an import from the tropical Pacific. The tool was made by working a cutting edge on the apex of a spiral gastropod shell, identified as *Acus crenulatus* (formerly *Terebra crenulata*) (family Terebridae). Similar tools have been found in a number of sites in tropical East Polynesia, dating to the same general time period as Wairau Bar. The tool supports the view that the Wairau Bar site was a pioneering settlement close in time to the initial Polynesian arrival in New Zealand.

Keywords: Wairau Bar, Hawaiki, shell tool, Terebridae, Acus crenulatus, East Polynesian Archaic.

### INTRODUCTION

Māori oral histories tell of famous named stone adzes used to fashion the great voyaging canoes in Hawaiki, the ancestral homeland in the Pacific, and brought on those canoes to Aotearoa/New Zealand (Neich 2009: 361; Best 1974: 240–245). The present paper describes a humble shell tool, possibly discarded without ceremony when it wore out, which nonetheless provides a link between tropical East Polynesia and an early Māori village in New Zealand.

In June 2010, during research for an exhibition, *Kei Puta Te Wairau: a Celebration of Maori Art and Heritage in Marlborough*, to be held at the Millennium Gallery in Blenheim, this shell tool, now recognised as a taonga (precious thing) of considerable importance, was noticed in the extensive collection of shell, bone and stone items from Wairau Bar in storage in the Canterbury Museum. The shell appeared to be exotic to New Zealand, perhaps a specimen of *Terebra* sp. (Bratcher & Cernohorsky 1987:19), with the apex modified to form a cutting edge.

The Wairau Bar site (033/4), known to local Māori as Te Pokohiwi ō Kupe, is one of the best known early archaeological sites in New Zealand, following work there by Duff (1942, 1956), who used artefacts from Wairau Bar to demonstrate relationships between the material culture

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janet.davidson@university-of-ngakuta.ac.nz Submitted 11.03.11, accepted 16.05.11 of the first colonists of New Zealand and that of tropical East Polynesia.

In this article, we identify the shell of the tool from Wairau Bar as *Acus crenulatus* (formerly *Terebra crenulata*)<sup>5</sup> and examine the integrity or otherwise of the context in which it was found. We review the use of tools made from shells of the Terebridae family in the Pacific with particular reference to Polynesia, and their function, distribution and age. We consider the significance of the find to the understanding of Wairau Bar and to Rangitane o Wairau, who hold mana whenua (authority) over the site today.

# THE SHELL TOOL (E199.1245)

The shell was identified by Marshall as *Acus crenulatus* (Linnaeus 1758), a species exotic to New Zealand (Terryn & Holford 2008: 15–16). Comparisons were made with the *A. crenulatus* reference collection at Te Papa, which contains specimens from many parts of the Pacific and beyond (Figure 1 and Appendix 1). This shell from Wairau Bar compared positively with many of the specimens. It was apparent that because of the variation in morphology observed, even within island groups, and a lack of knowledge of natural variation and taxonomy among terebrids, there is no way of identifying a specific island source with confidence. *Acus crenulatus* is found in coarse sand and

<sup>5</sup> Recent revisions of the Terebridae family have reassigned some of the terebrid shells most commonly used for tools in the Pacific, formerly *Terebra maculata*, *T. crenulata* and *T. dimiata*, to the genus *Acus*. Here we retain the old published names when they have been specifically referred to in the literature and use the term terebrid in more general discussion.

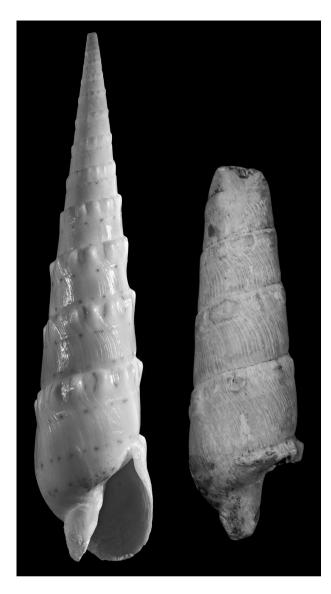


Figure 1. The shell tool from Wairau Bar, E199.1245, compared with an unmodified specimen of *Acus crenulatus* (NMNZ M.208726) from Te Papa's reference collection.

coral rubble with a distribution throughout the 'tropical Indo-Pacific, from the Red Sea and the whole eastern seaboard of Africa to the offshore Islands of Mexico' (Terryn & Holford 2008:16).

The shell itself is weathered. It shows evidence of six body whorls, with the base, aperture and outer lip broken. Although the break is old and shows signs of possible hammer dressing, there is no evidence to suggest that this was intended to form a cutting edge, as in the modification and grinding found in terebrid artefacts with a cutting edge on the aperture (see below). It weighs 24.9 g and is 69 mm long and 21 mm wide. The apex has been modified, preventing a true measurement of the original shell. Comparison with similar-sized reference specimens in Te Papa (M.208726 and M.223592) suggests that it would have

been between 97 and 107 mm in length, towards the upper end of the size range for the species.

The bevel is bifacial and has been modified by grinding on multiple faces, the largest of which is rounded towards the apex, and has been ground through the shell on one side leaving a hole (Figure 2). The other faces, one of which has been ground on the opposite side to the first, connect to the working edge, which is worn and broken. The working edge angle is 63 degrees, the major bevel angle 61.5 degrees and the minor bevel angle 55.5 degrees. In keeping with the taxonomic name, the subsutural band is crenulated with nodes. These show evidence of flattening through wear. It is possible that this is the result of hafting but this cannot be confirmed because of natural surface degradation and lack of ethnographic evidence about how these tools were used.

# THE CONTEXT OF THE FIND

The shell tool is provenanced to the Wairau Bar archaeological site. It was found by Jim Eyles, whose association with Roger Duff and the Wairau Bar is well documented (Duff 1956; Eyles 2007). It was first recorded simply as '1871 shell artefact' in an archaeological register: *A Record of Maori and Pre-Maori Relics. Compiled by James Roy Eyles, 1st May 1942; Wairau Bar, Blenheim* (typescript copy in Archaeological Document Files, Canterbury Museum). The number was written on the shell by Eyles. The approximately 2000 objects listed in this register are collectively referred to as the 'Eyles Collection'. Without exception, the few objects in the register that are not from Wairau Bar are clearly provenanced.

As a child, Jim Eyles lived at the northern tip of the Wairau Bar with his family, who leased the adjoining land on which the archaeological site is situated from the Wairau Harbour Board and farmed it. In January 1939, he 'discovered' the site, which had previously been known to local artefact collectors, unearthing a burial with grave goods. These were purchased by the then Dominion Museum in Wellington.

It was only after Eyles uncovered further material in 1942 that Roger Duff, then Ethnologist at the Canterbury Museum, became involved. Subsequently, by agreement with Jim Eyles and with the consent of his parents, excavated material, including human remains and artefacts, were forwarded 'on loan' to Canterbury Museum, where they formed the nucleus of the Eyles Collection. In 1942, encouraged by Duff, Eyles began the register of his finds. Eyles and Duff continued to operate on this mutually cooperative basis between 1942 and 1946, when the lease changed hands. Canterbury Museum was able to negotiate with the Wairau Harbour Board and the new lessee to protect the Museum's ongoing interests, in effect obtaining what the Museum regarded as an exclusive right to excavate and retain archaeological material from Wairau Bar. From this time forward the Museum authorities con-

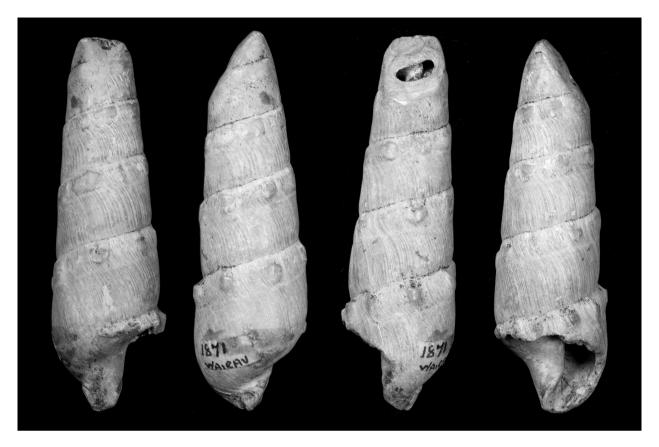


Figure 2. Front, side and back views of the shell tool E199.1245. The length of the tool is 69 mm.

sidered that all excavations were to be officially-sanctioned Museum activities and all new finds were to be added to the Museum's permanent collection. In late 1946, Eyles commenced intermittent part-time employment with Canterbury Museum and from March 1950 until April 1955 he was formally employed as Technical Assistant in Ethnology.

No field notes or other documentation have been located that might provide a precise archaeological context for the shell tool. However, some references help to shed light on it. Artefact number 1871 in the Eyles Register is part of a group of items (1782–1909) recorded as having been excavated in 1946. Eyles himself later contradicted the chronological information in his register:

In early February 1947 I stopped off at Wairau Bar, where I was detailed by Roger Duff to continue digging in a previously-rich midden area. The results, recorded in my catalogue as numbers 1587 to 1780, were phenomenal. Every aspect of Moa hunter culture was represented, with several new examples of necklaces, small tools such as sandstone files, drill points, and substantial adze caches. (Eyles 2007:118)

There are no entries in the typescript copy of the Eyles register for numbers 1586 to 1781.

Duff appeared to have a different perspective of this excavation. Visiting Wairau Bar in September 1949 for the first time since October 1945, he noted in his field book:

The signs of a fairly extensive area dug (unofficially) by Jim Eyles since then [Duff's last visit] were quite clear towards the lagoon edge of paddock 1 near the former northern boundary fence. Jim had covered a zone 2 chains long by 28 feet wide shrewdly aligned along the rich lagoon edge deposits.... (Duff, Field Book 3, p. 43. Canterbury Museum Archives, Ethnology 6/10, Box 16.50).

Despite their divergent views about the legitimacy of this extensive dig, it is clear that both Eyles and Duff were describing the same excavation event. It seems reasonable, therefore, to conclude that the shell tool Eyles recorded as 1871 excavated in 1946 was in fact excavated in February 1947 in the 'rich midden area' both men describe.

After protracted negotiations, the Eyles collection was eventually purchased by Canterbury Museum in 1981. The shell tool, 1871 in the Eyles collection, was catalogued into the Museum inventory as E199.1245.

Following excavations in January 2009 by archaeologists from the University of Otago to clear the way, human remains excavated at Wairau Bar and taken to the then

Dominion Museum and Canterbury Museum were formally reburied at the site on 16 April 2009.

# TEREBRIDAE ARTEFACTS IN THE PACIFIC

Two main classes of tools were made from terebrid shells in the Pacific; these have fairly distinct distributions in time and space and appear to be relatively recent in both areas.

In the Western Pacific, a curved cutting edge was formed on the body whorl of the shell; the bevel and back were shaped by chipping and grinding away the lip and one part of the side. Mitridae shells were also used in this way in some island groups. These tools are usually described as adzes. They are found widely in Micronesia and those parts of Melanesia, such as Vanuatu, where shell adzes of various kinds were used; most if not all date to the last millennium (Intoh 1999: 413–415; see also Davidson 1971: 54–55; Garanger 1972: 107–108). At least some were hafted like adzes in recent times (Davidson 1974; Garanger 1972: fig. 302c–f).

Szabó (2005) found very little evidence of the working of terebrid shells in the Western Pacific Lapita sites she studied and none in her immediately antecedent sites in Island Southeast Asia. A *Terebra maculata* 'gouge' with a bevel on the body whorl, from the top of the RL2 (Nenumbo) Lapita site in the Santa Cruz group, was probably not part of the Lapita deposit; a slightly deeper shell from the same site and one from Naigani in Fiji had apical whorls removed (Szabo 2005:196, 230). The purpose of this was not clear, although Szabó suggested the tips might have been used for drills. Kirch *et al.* (1991:147, 153–154) argue that the use of terebrid tools in Mussau was a post-Lapita development.

In the other class of tool, the apex of the spire, not the whorl, was used for the working part. The Wairau Bar tool belongs in this class.

Human use of the apices of spiral gastropods may have a long history in the Pacific. Wickler (2001:197, 199) found 11 apparently worked examples of the mud-dwelling snail *Terebralia palustris* in deposits dating between 5,500 and 10,000 YBP at Kilu Cave on Buka. These shells had been ground on one or both sides of the apex, although the function was not apparent. Wickler suggested a possible similarity to more recent terebrid shell chisels. The Buka tools are widely separated in both time and space from the more recent terebrid tools with which this paper is primarily concerned.

Terebrid apex tools are found mostly in the eastern Pacific and particularly in Central East Polynesia. Although the majority are bevelled and are usually described as chisels or gouges, some have been identified as 'percussors', and some as drill tips. The question of function is discussed further below.

Beyond East Polynesia, a few terebrid tools using the apex of the shell have been reported from Tonga, includ-

ing an example of *T. maculata* from a secure Lapita context at Faleloa on Foa Island, Haʻapai group (D. Burley, pers. comm. 2011). This appears to be the oldest example yet found. There is one from To-6 on Tongatapu, made from a *T. dimidiata* shell, which Poulsen (1987:182) described as ʻlate period'. A double bevelled example on *T. maculata* from To-4 has no datable context, and a single example, not identified to species, from NT-100 on Niuatoputapu in the north of the Tongan Archipelago was a surface find (Kirch 1988:198, 203, fig. 123c). A single example of unknown age has been reported from Kabara in the Lau Islands of Fiji (Poulsen 1987:182). None were found during recent excavations at Naigani in Fiji (G.J. Irwin, pers. comm. 2011). The geographical extent within Polynesia includes examples of unknown age from Tuvalu (Kennedy 1931:293).

Further afield, *T. maculata* apex tools were found in late contexts on the Polynesian outlier of Nukuoro in the Caroline Islands, where *T. maculata* body whorl tools were also found; in two instances a shell had been bevelled at both ends (Davidson 1971:54). Use of the apex has been reported from elsewhere in Micronesia (Takayama and Intoh 1980:42), although most of these are considered doubtful (Poulsen 1987:182). A definite example from Guam in the far west was illustrated by Reinman (1977: fig. 40r).

# TEREBRIDAE ARTEFACTS IN EAST POLYNESIA

Terebrid apex tools have been found in a number of early sites in tropical East Polynesia with material culture that has been attributed to the East Polynesian Archaic (Walter 1996), in contexts dating before AD 1400, and usually before AD 1300. Opinion on the age of initial occupation of some of these sites has varied widely. A recent evaluation of a large number of radiocarbon dates suggested an initial settlement of the Society Islands AD ~1025-1120, followed by rapid dispersal throughout the rest of East Polynesia AD ~1190-1290 (Wilmshurst et al. 2011). Other authors still prefer earlier dates for the colonisation of East Polynesia. For example, Allen & McAlister (2010:63) suggest settlement of the Marquesas 'after the 9th century but before the 11th century AD'; Kirch et al. (2010:78) argue for a rapid spread 'through the chain of islands extending from the southern Cooks through at least some of the Australs, to Mangareva, the Pitcairn-Henderson group, and to Rapanui, at approximately AD 1000.'

Early tropical East Polynesian sites with tools similar to the Wairau Bar example are listed here (Table 1). By far the most examples were found at Vaitoʻotia/Faʻahia. They are listed in a number of reports about that site. Only the principal references are given here. The descriptions are those given by the authors cited. Relatively few of the tools have been illustrated and verbal descriptions are, with a few exceptions, minimal. The exact nature of the cutting edges is therefore often not known.

Island Group	Site	Description	Reference	
Society Islands	Vaitoʻotia/Faʻahia, Huahine	Several types of 'chisel' 'percussors' 'ciseaux & gouges'	Sinoto and McCoy 1975:159 and fig. 7a, b, p. 160; Sinoto and Han 1981:10; Sinoto and Han 1985:10; Pigeot 1986:25; 1987:20–21.	
	Vaihi, Ra'iatea	'Chisel'	Emory 1979: 204, citing Semah et al. 1978.	
	Te Amaama, Moʻorea	'Gouges' or 'chisels'	Green et al. 1967: 182, 197, fig. 21d.	
Marquesas	Hanamiai	'Gouges'	Rollett 1998: 219, 222.	
Southern Cooks	Anaiʻo, Maʻuke	'Chisels'	Walter 1998: 50–51.	
	Ureia, Aitutaki	'Chisels'	Allen and Steadman 1990:35.	
Austral Group	Peva, Rurutu	'Chisels'	Bollt 2008:169.	
	Atiahara, Tubuai	'Chisels'	Implementology 2011.	

Table 1. Terebrid apex tools from early contexts in East Polynesian sites.

In addition to these examples from secure provenances, Suggs (1961:133) reported a bifacial 'gouge' of *T. crenulata* from a trash pit at the early Ha'atuatua sand dune site on Nuku Hiva in the Marquesas and noted drill points of both *T. maculata* and *T. crenulata* from several sites dating to all periods in his sequence on the island (1961:130–131). A single bevel fragment was found at Teavau'ua on Nukuhiva, in what was almost certainly a Layer III context (*c.* AD 1400–1650) (M.S. Allen pers. comm. 2011).

Emory and Sinoto (1965: 86) reported surface finds of terebrid 'chisels' during their surveys on Mo'orea, Borabora and Ra'iatea, implying that they may have been used for much or all of the prehistoric sequence in the Society Islands. There appears to be no evidence of their use there at first European contact. Kaeppler (1978:153, 154, fig. 278) describes and illustrates only bone 'chisels' in Cook Voyage collections from the Society Islands and although Oliver (1974:137) mentioned 'gouges made from shell' as part of the Ma'ohi (Society Islander) tool kit, he cited only the archaeological examples from Te Amaama on Mo'orea.

Miller (n.d.) has described surface finds of 'chisels' of *T. maculata*, *T. crenulata*, and *T. subulata* from several sites other than Atiahara on Tubuai, arguing that they have been brought to the surface by recent cultivation and probably date to a relatively early period. He cited Vérin (1969:195) as having found one at Narui on Rurutu. Sinoto (1978:157, 159) reported examples from Reao in the Tuamotus.

By far the largest number of terebrid apex 'chisels' from an East Polynesian archaeological site is from Vaito'otia/Fa'ahia on Huahine in the Society Islands, particularly from Section 5 of Zone A at Fa'ahia, where 55 were reported by Sinoto and Han (1981:10). In a subsequent paper they described these tools in more detail. Species are listed as *T. achates, T. crenulata* (i.e., *A. crenulatus*), *T. dimidiata*, *T. guttata*, *T. maculata* and *T. subulata*. All have a unifacial bevel on the apex, with bevel angles ranging from 40 to 70 degrees. Three types, including one with two subtypes, were established, based on the extent of modification of the proximal end, the presence of perforations in the re-

gion of the last whorl, and the grinding of surface knobs on the shell, particularly on *T. crenulata* (Sinoto and Han 1985:10). Subsequent finds of tools of *T. maculata* and *T. crenulata*, including bifacial examples, from Fa'ahia were reported by Pigeot (1986:25; 1987:20–21). None was found in more recent excavations there (A. J. Anderson, pers. comm. 2011).

Fa'ahia also yielded 12 terebrid apex tools that Sinoto and Han (1985: 10–11) described as percussors. In these the apex is rounded and blunted by use. Some have rough modification of the proximal end, others have greater modification, as in the chisel types. Sinoto and Han assert that these tools were used 'to chip out pearl shells to form scrapers and graters.' The shells used for these tools were usually *T. maculata* and *T. dimidiata*.

Except where details are given above, terebrid tools from East Polynesian archaeological sites have usually been listed only as 'Terebra', without identification to species. Illustrations sometimes suggest that the tools are made on *T. crenulata* shells. The tool from Wairau Bar is very similar to illustrated examples from several East Polynesian sites (e.g., Walter 1998: Fig. 4.17).

It is apparent from the above review that there is a considerable range in the nature of modification of the apex. The Vaitoʻotia/Faʻahia ʻpercussors' appear to be a distinct tool type, for which a specific function has been proposed. In addition to the definitely bevelled chisels/gouges, and the percussors, Suggs identified what he considered to be drill bits, without providing a description. Koch (1965:152) figured a modern example of a pump drill from Kiribati with a terebrid shell point.

Beaglehole and Beaglehole (1938:167,173) described an 'awl' made from *Terebra cranulata* (sic), known as a *yuki vaka*, from Pukapuka. This was used for making holes in a canoe hull or wash strake where a metal tipped drill could not be used, or for enlarging holes made by the metal drill. Unfortunately, although they described the use of this tool in some detail, they did not provide an illustration. The shell was sometimes 'lashed to a wooden holder about 6

inches long.... The point of the shell was held against the wood with the left hand and the wooden holder tapped smartly with a mallet...'.

A completely different use of terebrid shells in Hawai'i was as gourd stoppers (Hiroa 1957:58, 64). The shells were attached by passing a cord through a perforation in the body whorl. Green *et al.* (1967:199) considered this possibility for a terebrid shell from Te Amaama with a rough perforation in what they describe as the first whorl. Since some of the definite chisels from Vaitoʻotia/Faʻahia had one or two perforations in what Sinoto and Han (1985:10) described as the last whorl, the Te Amaama shell may just be a Vaitoʻotia/Faʻahia Type IIb chisel in the making.

This review shows that there is considerable variability among the tools described in the literature as chisels and gouges: unifacial and bifacial bevels, straight, curved and even beaked cutting edges, flat and concave bevels. During the life time of one shell tool, its exact configuration could probably change considerably. A beaked and slightly concave bevel could change to a curved and then partly straight edge and from concave to flat bevel as it was progressively resharpened by grinding. The Wairau Bar tool, with its relatively wide straight edge and perforated bevel, had almost certainly reached the end of its life when it was discarded or lost.

Pigeot (1987: 21) raised the question of the function of the terebrid tools found in the domestic habitation structure C50 at Fa'ahia, without offering an answer. Were they for working stone, wood, bone, or shell (particularly grooving pearl shell)? She noted that some were found in a working area in association with whole pearl shells, fragments of clam shells, and objects and waste of turtle bone, while others were not. In our view they were most probably used in wood carving. The account by Beaglehole and Beaglehole (above), suggests that aspects of canoe making are a possibility; decorative wood carving is another.

The apparent variation in bevel and cutting edge form suggests that these tools could perform various tasks; one craftsman might have several with slightly different working tips and in different stages of their life. There is clearly scope here for some experimental work.

# HAWAIKI CONNECTIONS

It has long been concluded that the immediate homeland of the New Zealand Māori, referred to in oral narratives as Hawaiki, was somewhere in central East Polynesia. As long ago as AD 1770, Cook and Banks commented on the close similarities in the customs, traditions and language of Māori and Tahitians (Beaglehole 1963: 37, 1968: 288). Connections in material culture between New Zealand and tropical East Polynesia were identified by Skinner (1938, 1942) and taken up and elaborated on by Duff (1942, 1956) on the basis of his excavations at Wairau Bar. Studies in historical linguistics (e.g., Marck 1996) and biological anthropology (e.g., Pietrusewsky 1996) supported the close

relationships between East Polynesians.

Excavations in early East Polynesian sites from the 1960s onwards produced adzes, fishhooks, harpoons, personal ornaments, tattooing chisels and even patu (hand clubs) with close similarities to objects from early New Zealand sites (Davidson 1984: 63–66, 73, 77–83, 90–91, 93, 102; 2011). Direct and incontrovertible evidence of contact between any tropical island and New Zealand has been much more elusive.

In 1964, a small trolling lure shank found in the lower layer of a stratified site at Tairua, on the Coromandel Peninsula, was identified by A.W.B. Powell of the Auckland Museum as black lipped pearl shell, Pteria margaritifera [now Pinctada margaritifera] (Green 1967). This was the first time that an exotic item from tropical Polynesia had been found in a secure context. Green (1967:82) argued persuasively that although quite a number of items of apparent tropical Polynesian origin (particularly adzes and fishhooks) had been reported in New Zealand, the contexts were either unknown or imprecise, and at least some appeared to be post-European introductions. According to Green, therefore, the Tairua lure was particularly important, but should not have occasioned as much surprise as it did, since occasional early introductions were to be expected. The Tairua site is not as old as it appeared to be in 1967, but it is still an early site in the New Zealand context. Although Green's suggestion that the lure shank was probably brought to New Zealand from the Marquesas (rather than some other part of tropical East Polynesia) may no longer hold, his paper remains an important contribution to our understanding of connections between New Zealand and Hawaiki.

In the 47 years since the Tairua lure was found, no further exotic artefacts have been found in early sites in New Zealand, although potentially important exotic items without good archaeological contexts continue to be reported.

The Wairau Bar tool is not from a secure archaeological context, but it is from a known early site of great importance and has been shown above to be typical of a type widespread in early East Polynesian sites, but rare or absent in later times. It is reasonable, therefore, to deduce that the Wairau tool was brought to the site, if not by an actual migrant from tropical East Polynesia, by a close descendant of such a person. Unfortunately, the lack of a precise context precludes further consideration of the tool's life history. Unless further documentation comes to light, which is highly unlikely, we cannot know for sure whether it was casually discarded, its significance as a link with the homeland forgotten, or whether it was actually treated in a more formal, ritually significant way.

Despite numerous accounts of return voyages to the immediate Pacific homeland of Hawaiki, no artefacts of New Zealand origin have yet been identified in early tropical East Polynesian sites. Archaeological evidence of return voyaging to any potential homeland islands is therefore lacking. This is not to say that such evidence will

never be found. Obvious examples would be tools made of stone that can be securely sourced to New Zealand and artefacts such as ornaments and items of fishing gear that have been made from bones identifiable as those of moa or other endemic New Zealand birds.

It has become clear, moreover, that the discovery and colonisation of mainland New Zealand was part of a burst of exploration that extended to the Chatham Islands, the sub-antarctic Auckland Islands, the Kermadec Islands and Norfolk Island and probably involved two-way voyaging within this region. Obsidian sourced to Mayor Island in the Bay of Plenty has been found in the Chatham, Kermadec, Norfolk and Auckland Islands (Walter *et al.* 2010:504); possible Raoul Island obsidian has been found in New Zealand (Anderson & McFadgen 1990). This is exactly the sort of evidence that may in future document one or more return voyages to tropical East Polynesia.

# CONCLUSION

The discovery that a shell tool found at Wairau Bar was made from a tropical shell, *Acus crenulatus*, and was thus an import from the tropical Pacific reinforces the view that Wairau Bar was a pioneering settlement in New Zealand. This appears to be only the second taonga so far found in an early New Zealand archaeological site that originated in an island in the tropical East Polynesian homeland region of Hawaiki.

Our review of the distribution of terebrid apex cutting tools in the Pacific has shown that they were common in the East Polynesian Archaic, being documented from the Society, Marquesas, Cook and Austral Islands, although particularly numerous in the Society Islands. Their widespread presence in early central East Polynesian sites and apparent absence from more recent sites raises interesting and as yet unanswered questions about their function, which might be addressed by future research. We hope that this paper may stimulate further interest in the distribution and function of these rather insignificant artefacts.

It is surprising that neither Eyles or Duff, nor any other archaeologist working with the Wairau Bar collection, recognised that this shell tool was exotic and therefore potentially significant. It is clear that ongoing study of archaeological collections held in museums has an important role to play in updating our understanding of sites and the lives of their inhabitants and opening fresh perspectives on the past.

For Rangitane o Wairau, this little tool is further evidence of the importance of Te Pokohiwi ō Kupe and its connections with Hawaiki.

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# APPENDIX 1.

Comparison of the shell of the Wairau tool, E199.1245, with specimens of *Acus crenulatus* (Lin.) in Te Papa's reference collection, identified by Bruce Marshall. Specimens collected and donated at various times from about 1920 onwards.

Reg No.	Match with E199.1245	No.	Region	Locality
M.204824	Compares favourably	1	Western Samoa	Upolu, Mulivai
M.208726	Compares favourably	3	Pitcairn Group	Oeno Island
M.218096	Compares favourably	1	American Samoa	Tutuila
M.223592	Compares favourably	2	Solomons	Marau Sound, Southern Guadalcanal
M.232480	Compares favourably	1	Okinawa	
M.240374	Compares favourably	1	Malaita	
M.240408	Compares favourably	1	Guadalcanal	
M.241873	Compares favourably	1	Queensland	Hope Islands
M.250472	Compares favourably	3	Western Samoa	Apia, inside lagoon
M.250475	Compares favourably	5	Western Samoa	Apia, Sogi
M.255037	Compares favourably	5	Solomons	
M.255038	Compares favourably	1	Philippines	Davao
M.255039	Compares favourably	1	Fiji	Suva
M.266264	Compares favourably	1	Fiji	Malolo Island
M.300692	Compares favourably	5	Queensland	reef 3.2 km NE of Michaelmas Cay
M.218094	No match – nodulation in referernce specimen weak, close and low	2	Western Samoa	Upolu
M.218563	No match – nodulation in reference specimen weak, close and low	2	Tongatapu	Velitoa
M.222625	No match – nodulation in referernce specimen weak, close and low	1	Niue	
M.223729	No match – nodulation in referernce specimen weak, close and low	1	Guadalcanal	Maraunibina Island, Marau Sound
M.226499	No match – nodulation in reference specimen weak, close and low	2	Vava'u	
M.242406	No match – nodulation in referernce specimen weak, close and low	1	Rarotonga	
M.266265	No match – nodulation in referernce specimen weak, close and low	2	Israel	Elat
M.204848	No match – nodulation in reference specimen too pronounced, whorl more angular	1	Tuvalu	Nanumea
M.238282	No match – nodulation in reference specimen too pronounced, whorl more angular	2	Malaita	
M.241872	No match – nodulation in reference specimen too pronounced, whorl more angular	2	Queensland	Low Islands
M.241874	No match – nodulation in reference specimen too pronounced, whorl more angular	2	W. Australia	Broome
M.300693	No match – nodulation in reference specimen too pronounced, whorl more angular	1	Marquesas	
M.232481	Unidentified – reference specimen too small to tell	2	Hawaii	Oahu
M.240409	Unidentified – reference specimen too small to tell	3	Solomons	Wagina